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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/674,201 12/06/00 HALLSTROM

mk
H AN06182/3152

EXAMINER

IM52/0905

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DOBBS FERRY NY 10522-3408

CHIN, P	
ART UNIT	PAPER NUMBER

1731
DATE MAILED:

7
09/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/674,201

Applicant(s)

HALLSTROM ET AL.

Examiner

Peter Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-55 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 26-55 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

1. Claims 32,37,44, 50 and 54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 32,44 and 50: the limitation, "A and B are both nothing whereby there is a single bond between C and $N(O=C-NR_8R_9)$ " is not understood.

Claim 37 limitation is redundant it is essentially a duplicate of claim 36.

Claim 54, the limitation of the cationic monomer containing a benzyl or phenylethyl group is in conflict with and contrary to the limitation in claim 46 from which claim 54 depends from . The claim 46 calls for a non-aromatic hydrophobic group in the cationic monomer.

2. Claims 26-28,30-32,34-37,41,43,44-50,52-55 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sofia et al (4,795,531), Greenwood (5,876,563), or Langley et al (4,913,775).

Sofia et al, Greenwood or Langley disclose the addition of high molecular weight cationic polymer retention aid/flocculant, cationic polymer coagulant and colloidal silica or bentonite. The cationic polymer used in these references include the claimed monomer containing hydrophobic group: "MPTAC", column 3 of Sofia et al; dialkylamino-1,3-propyl(meth)acrylamide, column 15 of Greenwood; and dialkyl amino alkyl (meth)acrylates or (meth)acrylamides wherein the alkyl groups are 1-4 carbon atoms and the aminoalkyl group contains 1-8 carbon atoms, last paragraph column 8 of Langley et al. Thus, the references anticipate the claimed invention or at the least if

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any difference can be gleaned from the claims such difference would have been obvious.

Additionally note in regard to claim 43, the claimed specific area of the anionic silica based particles is inherently shown by the references since they use the same anionic silica based particles as the present invention. At the least it would have been obvious to employ anionic silica based particles having the claimed specific surface area since it is conventional in the art. If evidence is necessary see the prior art cited by Applicant.

3. Claims 29, and 42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Langley et al (4,913,775).

The claims are rejected as above.

4. Claims 26-45 rejected under 35 U.S.C. 103(a) as being unpatentable over Linhart et al (4,465,555), Baron et al (4,894,119) or Wong Shing et al (6,071,379) in view of Sofia et al (4,795,531) or Langley et al (4,913,775).

Linhart et al, Baron et al or Wong Shing disclose the claimed cationic polymer as a retention aid/flocculant for paper making except for the use of an anionic microparticulate material. Sofia et al show that the cationic polymer retention aid/flocculant of the type disclosed by the aforementioned references are commonly and conventionally used in conjunction with colloidal silica which is an anionic microparticulate. Langley et al similarly show that the cationic polymer retention aid/flocculant are typically and conventionally used with bentonite, an anionic microparticulate. Thus, it would have been obvious to employ the cationic polymers of the primary references as the cationic polymers in conventional retention systems as shown by Sofia

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et al or Langley et al since such use represents the ordinary and conventional use of cationic polymers of the type disclosed by the primary references.

5. Claims 46-55 are rejected under 35 U.S.C. 102(a or b) as being anticipated by Baron et al (4,894,119), Linhart et al (4,465,555), or Wong Shing et al (6,071,379) .

The references disclose the claimed polymers.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Chin whose telephone number is (703) 308-2046. The examiner can normally be reached from Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (703) 308-3837. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



PETER CHIN
PRIMARY EXAMINER